

Claims: We claim:

1) An unsolicited message rejecting communications processor connected to message transfer agents

MTA_0 with an Internet address of IP_0, from-address A_0, declared domain of D_0, and actual domain of DD_0, and

MTA_1 with an Internet address of IP_1 and to-address A_1

comprising:

- a) monitoring means for monitoring the communications between MTA_0 and MTA_1;
- b) determining means for determining if the communications contains an unsolicited message; and
- c) intercepting means for intercepting a RCPT command from MTA_0 and sending an error reply to MTA_0 if the message is determined to be unsolicited.

whereby MTA_1 controls the interaction between MTA_0 and MTA_1 before a RCPT command from MTA_0 is received and

whereby the connection with MTA_0 is rejected before the data portion of the unsolicited message is transmitted.

- 2) The unsolicited message blocking communications processor in Claim 1, further includes a allow_address database and wherein the determining means determines if a message is not unsolicited by checking if the IP_0 is in the allow_address database.
- 3) The unsolicited message blocking communications processor in Claim 1, further includes a prevent_address database and wherein the determining means determines if a message is unsolicited by checking if IP_0 is in the prevent_address database.

- 4) The unsolicited message blocking communications processor in Claim 1, further includes access to a open relay database and wherein the determining means determines if a message is unsolicited by checking if IP_0 is in the open relay database.
- 5) The unsolicited message blocking communications processor in Claim 1, further includes access to a DNS (domain name server) database and wherein the determining means determines if a message is unsolicited by checking if IP_0 has a domain name entry DD_0 in the DNS database.
- 6) The unsolicited message blocking communications processor in Claim 1, further includes a bad_from database and wherein the determining means determines if a message is unsolicited by checking if the from-address A_0 is in the bad_from database.
- 7) The unsolicited message blocking communications processor in Claim 1, further includes a suspect_domain database and wherein the determining means determines if a message is unsolicited by checking if the actual domain DD_0 matches the domain of from-address A_0 and the domain of from-address A_0 is in the suspect_domain database.
- 8) The unsolicited message blocking communications processor in Claim 1, wherein the determining means determines if a message is unsolicited by checking if the from-address A_0 matches the to-address (A_1).
- 9) The unsolicited message blocking communications processor in Claim 1, further includes a no_filter database and wherein the determining means determines if the message is to be blocked if it is determined to be unsolicited.

- 10) The unsolicited message blocking communications processor in Claim 1, wherein the determining means determines if a message is unsolicited by checking if the declared domain D_0 of MTA_0 is the same as the domain D_1 of MTA_1.
- 11) The unsolicited message blocking communications processor in Claim 1, wherein the determining means determines if a message is unsolicited by checking if the declared domain D_0 of MTA_0 does not match the real domain DD_1 and the declared domain D_0 is in the suspect_domain database.
- 12) The unsolicited message blocking communications processor in Claim 1, further includes a rejected_connection database which logs the time, from-address A_0, to-address A_1, and the reason for the rejection if a message is rejected if the message is determined to be unsolicited.
- 13) The unsolicited message blocking communications processor in Claim 1, further includes a allowed_connection database which logs the time and to-address A_1 if the message is determine not to be unsolicited.

14) A method for

a receiving networked computer system with an Internet connection, a mail transport agent MTA_1, an Internet address IP_1, to-address A_1, and an operating system capable of executing the method

to reject unsolicited messages from

a transmitting networked computer system with an Internet connection and a message transfer agent MTA_0, an Internet address IP_0, from-address A_0, declared domain D_0, and actual domain DD_0

comprising the steps of:

- a) waiting for a new SMTP connection request;
 - b) relaying and monitoring the replies from MTA_0 to MTA_1;
 - c) relaying replies from MTA_1 to MTA_0;
 - d) intercepting the RCPT reply from MTA_0 to MTA_1;
 - e) determining if the message is unsolicited by analyzing the monitored replies;
 - f) releasing the intercepted RCPT reply if the message is determined not to be unsolicited; and
 - g) sending a an error reply to MTA_0 if the message is determined to be unsolicited;
- whereby MTA_1 controls the interaction between MTA_0 and MTA_1 until a RCPT command is received from MTA_0 and
- whereby the connection with MTA_0 is rejected before the data portion of the unsolicited message is transmitted.

15) A method for

a receiving networked computer system with an Internet connection, a mail transport agent MTA_1, IP address IP_1, a domain name D_1, a recipient, A_1, an allow_address database, a prevent_address database, a suspect_domain database, a bad_from database, a no_filter database, a rejected_connection database, an allowed_connection database, and an operating system capable of executing the method

to reject unsolicited messages from

a transmitting networked computer system with an Internet connection, a message transfer agent MTA_0, an IP address of IP_0, a declared domain name D_0, a real domain name DD_0, and a sender address of A_0

comprising the steps of:

- a) waiting for a SMTP connection request on the receiving networked computer system's Internet connection;
- b) sending a 220 reply to MTA_0 to acknowledge the requested connection;
- c) extracting IP address IP_0 from the connection request;
- d) testing if the DNS database has a domain name DD_0 for IP_0;
- e) testing if IP_0 is in an open relay database;
- f) testing if IP_0 is in the allow_address database;
- g) testing if IP_0 is in the prevent_address database,
- h) requesting a connection with MTA_1;
- i) waiting for a 220 reply from MTA_1 to acknowledge the requested connection;

- j) waiting for a reply from either MTA_0 or MTA_1;
- k) jumping to step n) if the reply is not from MTA_1;
- l) relaying the reply from MTA_1 to MTA_0;
- m) jumping to step j) to wait for a new reply;
- n) jumping to step t) if the reply from MTA_0 is not a **HELO**;
- o) extracting domain D_0 from the reply;
- p) testing if declared domain D_0 of MTA_0 matches domain D_1 of MTA_1;
- q) testing if declared domain D_0 does not match real domain DD_0 of MTA_0
AND declared domain D_0 is in the suspect_domain database;
- r) relaying the HELO reply from MTA_0 to MTA_1;
- s) jumping to step j) to wait for a new reply;
- t) jumping to step z) if reply from MTA_0 is not a **MAIL**;
- u) extracting from-address A_0;
- v) testing if A_0 is in the bad_from database;
- w) testing if DD_0 does not match the domain of A_0 and the domain of A_0 is in
the suspect_domain database;
- x) relaying MAIL reply to MTA_1;
- y) jumping to step j) to wait for a new reply;
- z) jumping to step kk) if reply from MTA_0 is not a **RCPT**;
- aa) extracting to-address A_1;
- bb) testing if A_1 is in no_filter database;
- cc) testing if A_0 matches A_1;

- dd) jumping to step hh) if NOT(t_allow OR t_no_filter OR NOT (t_prevent OR t_open OR t_DD-) OR t_bad_from OR t_suspect_domain OR t_echo_domain OR t_forged_domain));
- ee) logging time and to-address A_1 in the allowed_connection database;
- ff) relaying RCPT reply to MTA_1;
- gg) jumping to step j) to wait for a new reply;
- hh) logging the time, from-address A_0, to-address A_1, and the reason for rejecting the connection in the rejected_connection database;
- ii) rejecting the connection to MTA_0 by sending a 550 reply to MTA_0;
- jj) jumping to step j) to wait for a new reply;
- kk) jumping to step vv) if reply from MTA_0 is not **DATA**;
- ll) relaying DATA reply to MTA_1;
- mm) waiting for a 354 reply from MTA_1;
- nn) relaying the 354 reply from MTA_1 to MTA_0;
- oo) waiting for the data from MTA_0;
- pp) relaying the data from MTA_0 to MTA_1;
- qq) waiting for a .\r\n from MTA_0;
- rr) relaying the .\r\n from MTA_0 to MTA_1;
- ss) waiting for a 250 reply from MTA_1;
- tt) relaying the 250 reply to MTA_0;
- uu) jumping to step j) to wait for a new reply;
- vv) jumping to step yy) if reply from MTA_0 is not **RSET, SEND, SCML, SAML, VRFY, NOOP, EXPN, HELP, or TURN**;

- ww) relaying reply to MTA_1;
- xx) jumping to step j) to wait for a new reply;
- yy) jumping to step ddd) if reply from MTA_0 is not a **QUIT**;
- zz) relaying the QUIT reply to MTA_1;
- aaa) waiting for 221 reply from MTA_1
- bbb) relaying 221 reply from MTA_1 to MTA_0;
- ccc) jumping to step a) to wait for a new connection;
- ddd) sending a 500 reply to MTA_0 to signal a syntax error; and
- eee) jumping to step a) to wait for a new connection.